

《高中英语》（上外版）选择性必修三 第四单元 第1课时  
学案（学生版）

## I. Pre-reading

**Interactive Task 1: Answer the following questions based on the pictures below.**

Q1: What is the possible relationship between the two polar bears?

Q2: What might have separated them from each other ?



**Interactive Task 2: Predict the main idea of the passage from the title and guess the villain in the atmosphere.**

Q1: What can you see in the picture? Can you describe the picture briefly?

Q2: Can you predict who is the “villain” in the atmosphere?

Q3: What do you expect to read in the passage from the title “The Villain in the Atmosphere”?

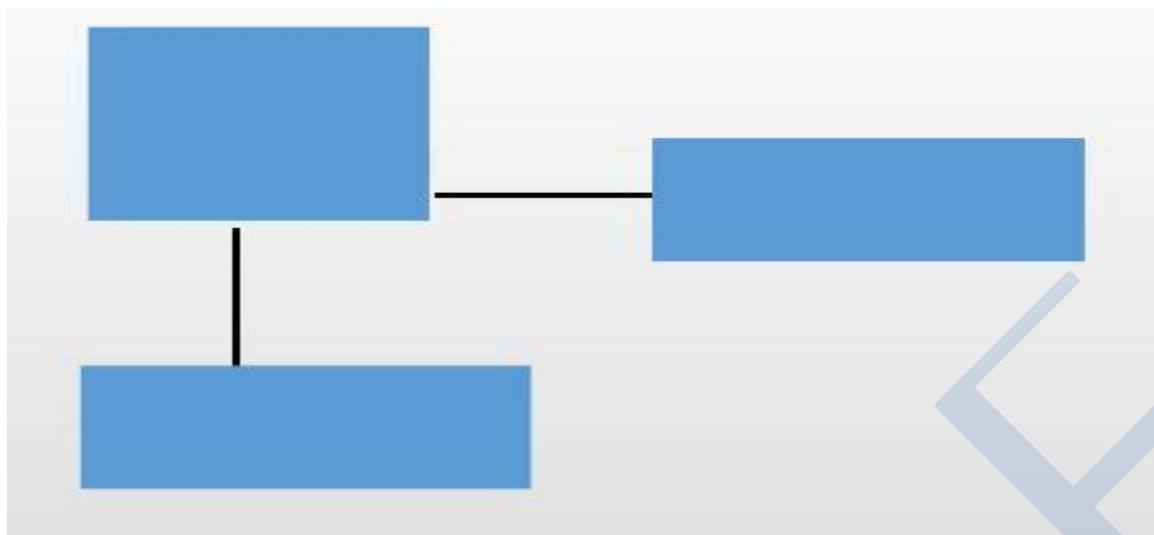


## II. While-reading

**Interactive Task 3: Skim the passage and find out the functions of Para.1, 4 and 7 and the organization of the passage.**

Q1: There are some short paragraphs (e.g. Para 1, 4 and 7) in the text. What functions do they serve?

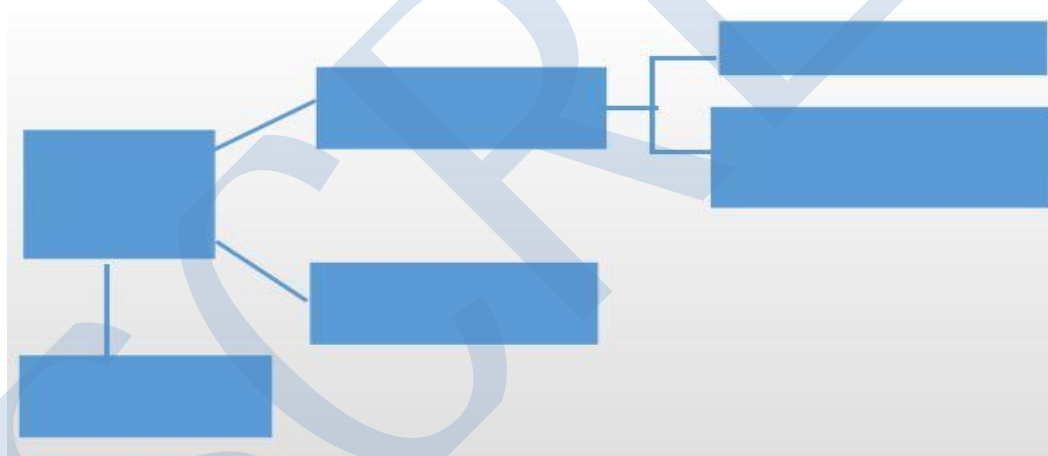
Q2: What is the organization of the passage?



**Interactive Task 4: Read Para. 2-3 and learn the function of small quantity of carbon dioxide, and then complete the mind map.**

Q1: Is the small quantity of carbon dioxide a villain?

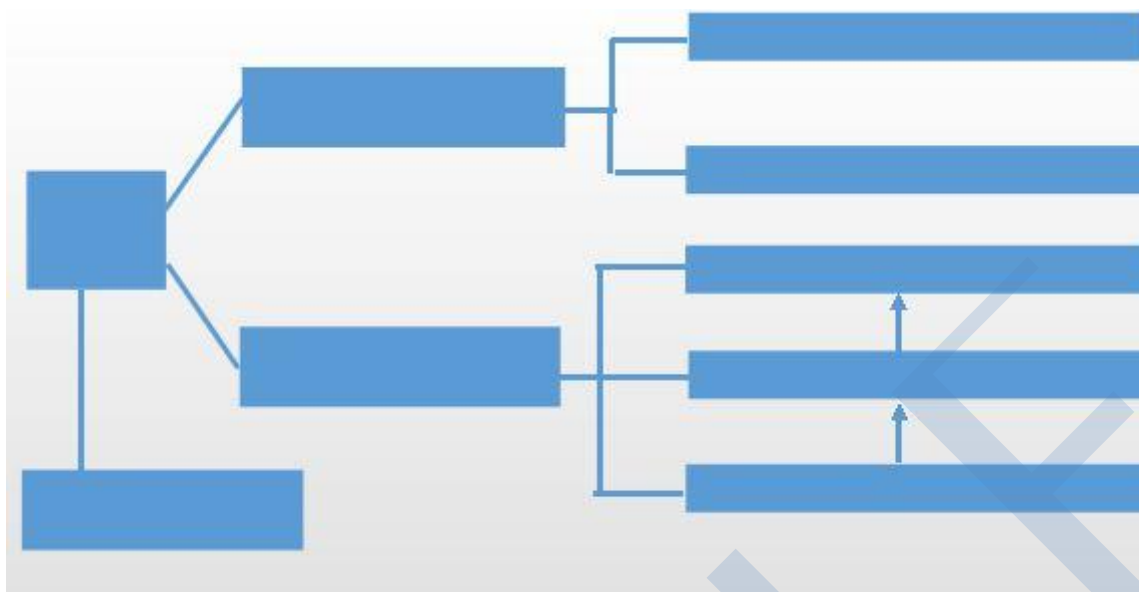
Q2: What functions does it serve?



**Interactive Task 5: Read Para.4-6, answer the teacher's questions based on the passage and complete the the mind map.**

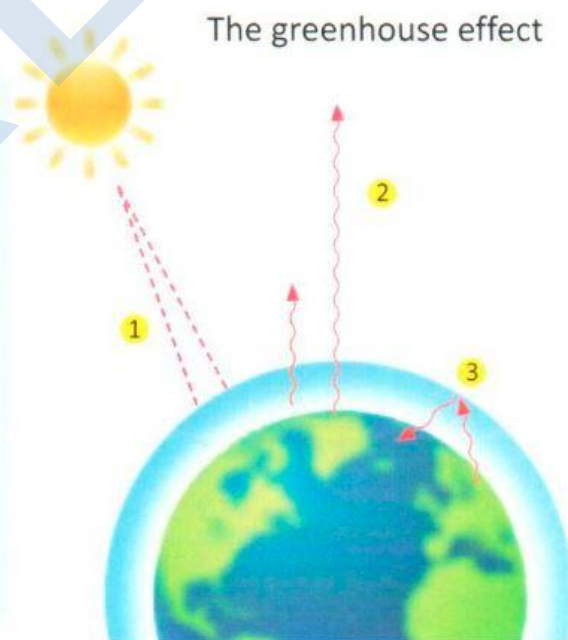
Q1: Why will Manhattan streets eventually be deep under water according to the author?

Q2: What's the result after many cities are drowned according to the passage?



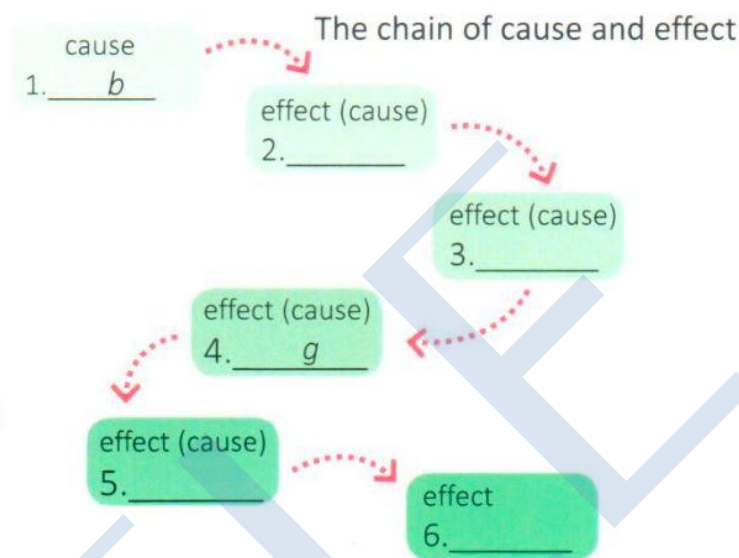
**Interactive Task 6: Read Para. 8 and complete the sentences corresponding to the diagram with one word for each blank.**

1. In the daytime, \_\_\_\_\_ travels through miles of the \_\_\_\_\_ to warm the \_\_\_\_\_.
2. At night, \_\_\_\_\_ is sent into space, which cools the earth.
3. Because of the existing carbon dioxide in the atmosphere, the \_\_\_\_\_ tends to be blocked, and \_\_\_\_\_ is lost at night.



**Interactive Task 7: Read Para.7-11, and tick what has been mentioned and then complete the chain of cause and effect.**

- ☐ a. greenhouse effect
- ☒ b. carbon dioxide
- ☐ c. oxygen
- ☐ d. urban heat island effect
- ☐ e. the rising sea level
- ☐ f. increased temperature
- ☒ g. the melting of ice caps
- ☐ h. the flooding of low-lying areas
- ☐ i. changeable weather
- ☐ j. hydrogen



### III. Post-reading

**Interactive Task 8: Summarize the passage according to the mind map of the text.**

#### Checklist

- ☐ Do you begin with a topic sentence that states the writer's opinion clearly?
- ☐ Do you cover the writer's main points?
- ☐ Do you use your own words?
- ☐ Do you use proper transitional words?
- ☐ Do you stick to original opinions?
- ☐ Do you limit the summary to 100 words?

**Interactive Task 9: Work in pairs and discuss the aim of the passage and the writer's attitude to the villain in the atmosphere.**

1. What is the writer's attitude to the villain in the atmosphere? Is he indifferent/ concerned/ delighted/ frightened?
2. What is the writer's purpose in writing this passage? To entertain/warn/complain/inform...?  
Has the writer achieved his/her purpose?

### IV. Homework

1. Read aloud the passage three times. Pay attention to your intonation, pronunciation and stress.
2. Build up a word bank related to the functions, the harmful effects and the causes of these consequences about CO<sub>2</sub>.